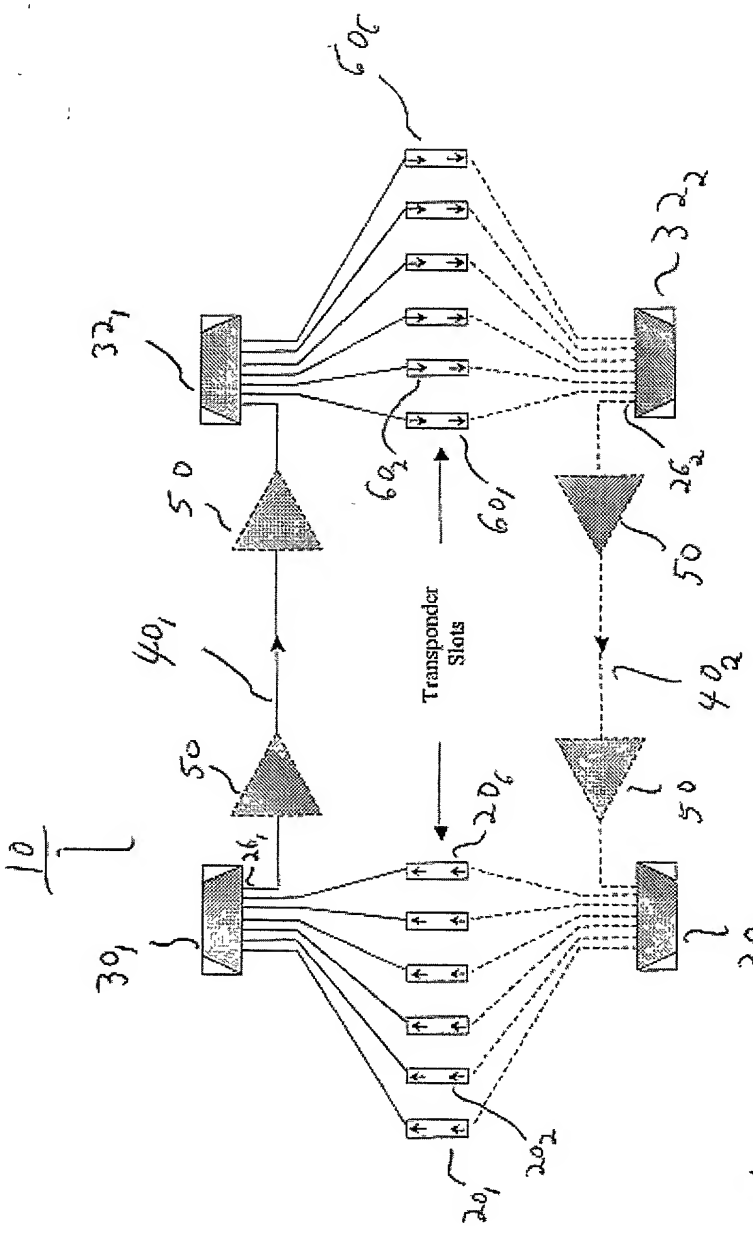

Fig. 1 – Reconfigurable Mux/Demux to enable wavelength independent transponder slots that can be wired with fixed optical connections and send/receive any λ

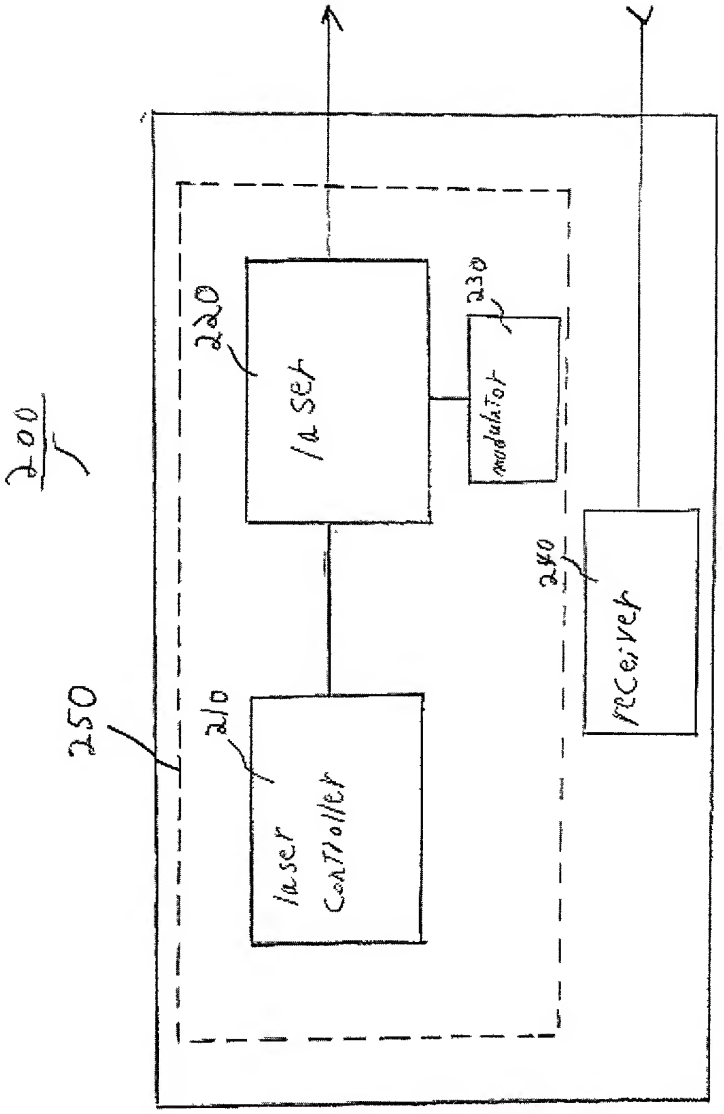
200
250
laser controller
210
laser
220
modulator
230
receiver
240

Fig. 2

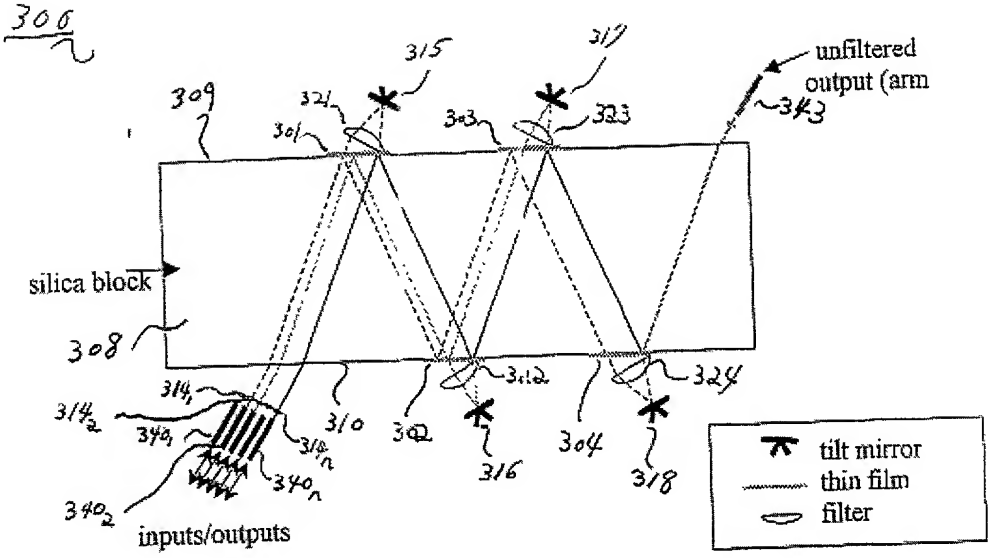

Fig. 3 - Bidirectional inputs/outputs with independent wavelength distribution

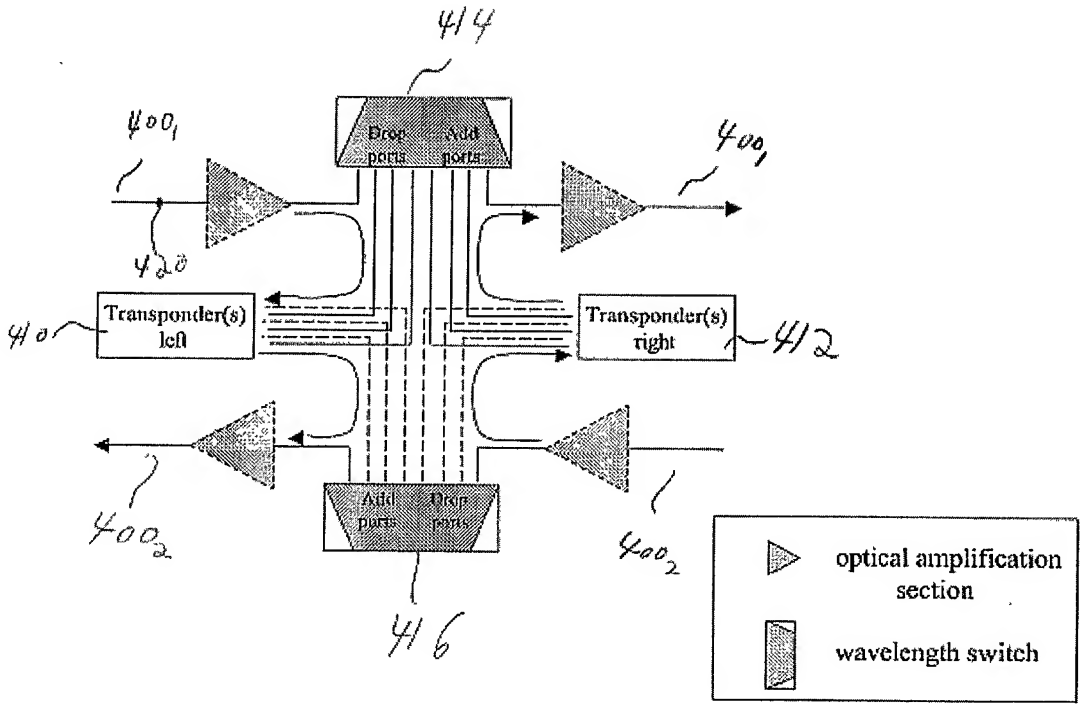

Fig. 4 - Mid-amplifier switch to Add/Drop channels to separate service paths on a unidirectional fiber pair system

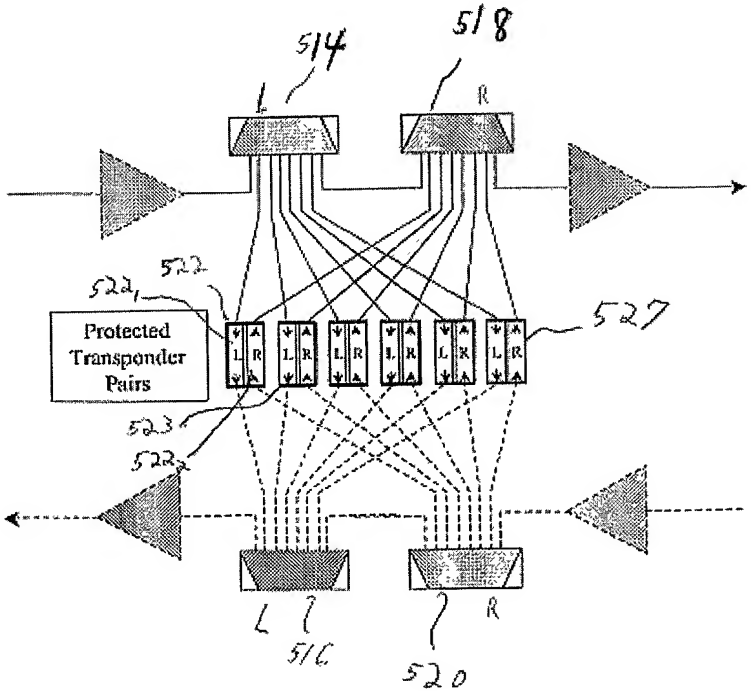

Fig. 5 - Switching system to Add/Drop signals with independent node paths (link and node disjoint)

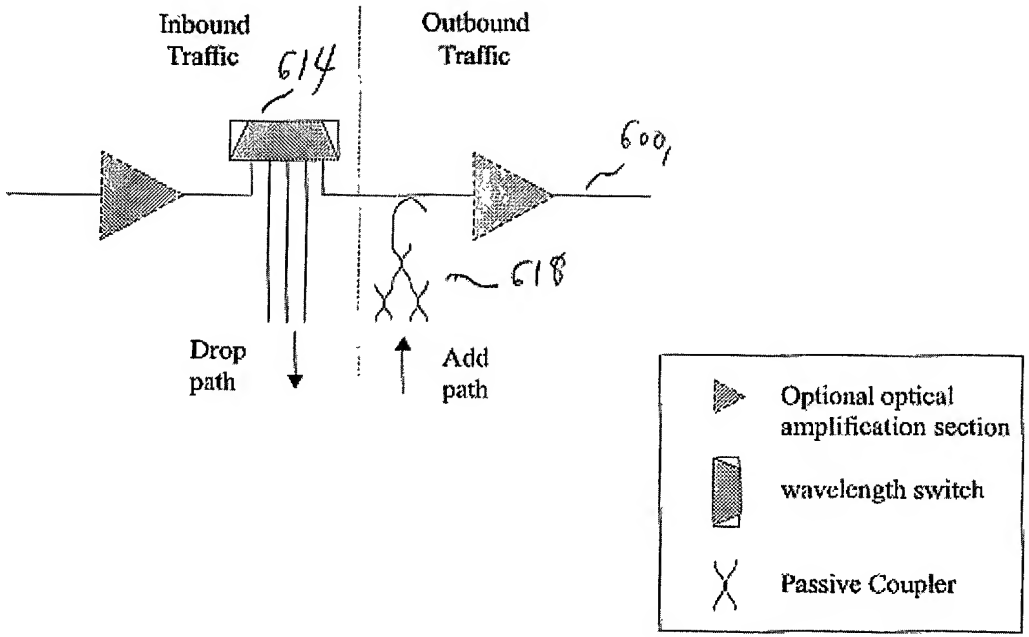

Fig. 6 - Mid-amplifier switch to Add/Drop with disjoint node paths using a low cost passive coupler to add signals

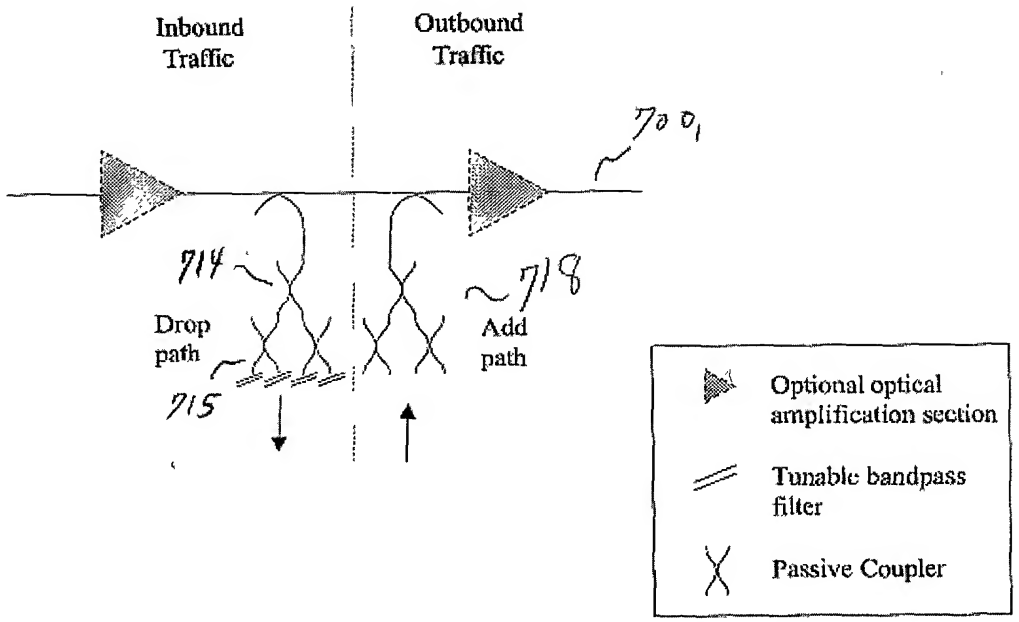

Fig. 7 - Inexpensive Add/Drop with link node disjoint paths without wavelength reuse due to no wavelength blocking (enables drop and continue of signal)

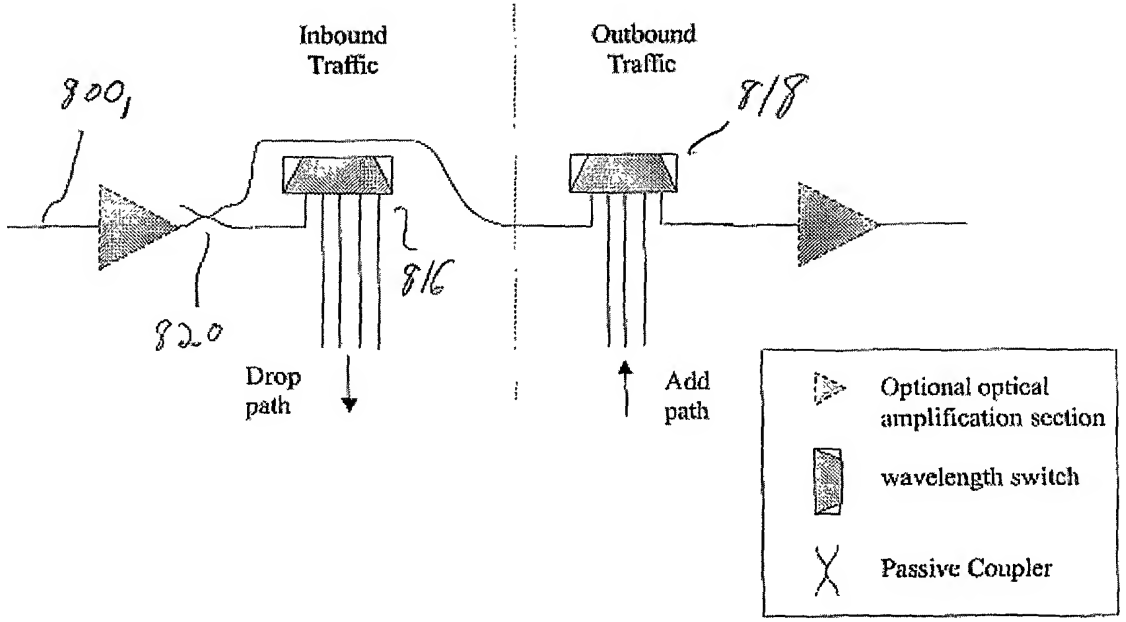

Fig. 8 - Mid-amplifier switching system with per wavelength Add/Drop, Drop and Continue signals with independent East/West node paths (with optional wavelength blocking)